AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE, AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS

1.   (Currently amended) A visualization system for a machine-tool or production machine, comprising:

a measuring and simulation system operatively connected to the machine-tool or production machine, said measuring and simulation system simulating a desired response of the machine-tool or production machine using simulation parameters, wherein the desired response defines an amplitude-frequency curve of the machine-tool or production machine, and wherein the simulation parameters are selected from the group consisting of a rotation speed control parameter, a position control parameter, and a travel path of a workpiece,

a controller generating control parameters with the simulation parameters and using the generated control parameters to control measuring an actual response of the machine-tool or production machine with the simulation parameters; and

a single display screen for visualizing the desired response and [[the]] a measured actual response of the machine-tool or production machine simultaneous simultaneously side-by-side on the single display screen in form of amplitude-frequency curves.

2.   (Original) The system of claim 1, wherein the measuring and simulation system is operatively connected to the machine-tool or production machine by a data link.

3.   (Original) The system of claim 1, wherein the measuring and display system is implemented as an integral system component of the machine-tool or production machine.

4.   (Original) The system of claim 2, wherein the measured actual response is transmitted via the data link in form of analog data.

5.   (Currently amended) A method for visualizing a simulated and measured response from a machine-tool or production machine, comprising the steps of:

provicling a simulation system;

simulating with the simulation system a desired response from the machine-tool or production machine, said desired response selected from the group consisting of a rotation speed control parameter, a position control parameter, and a travel path of a workpiece;

determining characteristic parameters associated with the simulated response, said characteristic parameters defining an amplitude-frequency curve of the machine-tool or production machine;

setting optimizing control parameters for a machine controller of the machine-tool or production machine based on the determined characteristic parameters;

measuring an actual machine response obtained with the control parameters; and

displaying the simulated response and the measured actual response simultaneously side-by-side in form of amplitude-frequency curves.

6.-10 (Canceled)